

What we claim is:

1. An external data-input device for a portable electronic device comprising:
a speech receiving and recognizing device detachably connected with
said portable electronic device for sending a controlling signal to said
portable electronic device when said speech receiving and
recognizing device receives a first sound speech signal; and
an input device detachably connected to said speech receiving and
recognizing device and said portable electronic device for storing said
controlling signal in said speech receiving and recognizing device
when said input device is connected to said speech receiving and
recognizing device.
2. The external data-input device according to claim 1, wherein said
speech receiving and recognizing device further comprises:
a microphone for receiving said first speech signal and converting
said first speech signal into an analog signal;
a filter electrically connected to said microphone for filtering noises
different from human sound frequency;
an analog-to-digital converter electrically connected with said filter
for converting said analog signal passing through said filter into a
first digital signal;
a storing device electrically connected with said analog-to-digital
converter for storing said first digital signal and said controlling
signal and building a corresponding relation between said first digital
signal and said controlling signal; and
a comparing device electrically connected to said analog-to-digital
converter and said storing device for comparing said first digital

signal stored in said storing device with a second digital signal which is converted from a second speech signal via said microphone, said filter and said analog-to-digital converter, and sending said controlling signal to said portable electronic device according to said
5 corresponding relation between said first digital signal and said controlling signal when the degree of the similarity between said first digital signal and said second digital signal is larger than a threshold value.

- 10 3. The external data-input device according to claim 2, wherein said comparing device is a digital signal processor (DSP).
4. The external data-input device according to claim 1, wherein said input device is a keyboard having a hot key for sending said controlling signal when said hot key is pressed.
- 15 5. The external data-input device according to claim 1, wherein said external data-input device further comprises a connecting cable detachably connected between said speech receiving and recognizing receiving device and said input device.
6. The external data-input device according to claim 1, wherein said external data-input device further comprises a connecting cable
20 detachably connected between said speech receiving and recognizing receiving device and said electronic device.
7. The external data-input device according to claim 1, wherein said electronic device is a personal digital assistant (PDA).
8. The external connecting external data-input device according to claim
25 1, wherein said electronic device is a mobile phone.
9. A speech inputting and controlling method for a portable electronic device and an external data-input device, wherein said external

data-input device has a speech receiving and recognizing device detachably connected to said portable electronic device and an input device detachably connected to said speech receiving and recognizing device and said portable electronic device, said method comprising steps of:

- 5 (a) causing said speech receiving and recognizing device to enter into a learning mode in a speech controlling state;
 - (b) receiving a first speech signal from a user and a controlling signal from said input device in said learning mode, and building a
10 corresponding relation between said first speech signal and said controlling signal;
 - (c) causing said speech receiving and recognizing device to enter into a waiting mode; and
 - (d) comparing said first digital signal stored in said storing device with a
15 second digital signal which is converted from a second speech signal via said microphone, said filter and said analog-to-digital converter, and sending said controlling signal to said portable electronic device according to said corresponding relation between said first digital signal and said controlling signal when the degree of the similarity
20 between said first digital signal and said second digital signal is larger than a threshold value
10. The method according to claim 9, wherein said second sound speech signal is received by said speech receiving and recognizing device.
 11. The method according to claim 9, wherein said portable electronic
25 device is a personal digital assistance (PDA).
 12. The sound speech inputting method according to claim 9, wherein said electronic device is a mobile phone.

13. An external data-input device for a portable electronic device,
comprising:

5 a speech receiving and recognizing device detachably connected
with said portable electronic device for converting a speech signal
into a digital signal and sending a controlling signal to said portable
electronic device; and

10 an input device detachably connected to said speech receiving
and recognizing device and said portable electronic device for storing
said controlling signal in said speech receiving and recognizing
receiving device when said input device is connected to said speech
receiving and recognizing receiving device.

14. The external data-input device according to claim 13, wherein said
speech receiving and recognizing device further comprises:

15 a microphone for receiving said speech signal and converting said
speech signal into an analog signal;

a filter electrically connected to said microphone for filtering noises
different from human sound frequency;

20 an analog-to-digital converter electrically connected with said filter
for converting said analog signal passing through said filter into said
digital signal;

a storing device electrically connected with said analog-to-digital
converter for storing said digital signal and said controlling signal,
and building a corresponding relation between said digital signal and
said controlling signal; and

25 a comparing device electrically connected to said analog-to-digital
converter and said storing device for comparing said digital signal
stored in said storing device with another digital signal which is

converted from another speech signal via said microphone, said filter and said analog-to-digital converter, and sending said controlling signal to said portable electronic device according to said corresponding relation between said digital signal and said
5 controlling signal when the degree of the similarity between said digital signal and said another digital signal is larger than a threshold value.

15. The external data-input device according to claim 13, wherein said comparing device is a digital signal processor (DSP).
- 10 16. The external data-input device according to claim 13, wherein said input device is a keyboard having a hot key for sending said controlling signal when said hot key is pressed.
17. The external data-input device according to claim 13, wherein said
15 external data-input device further comprises a connecting cable detachably connected between said speech receiving and recognizing receiving device and said input device.
18. The external data-input device according to claim 13, wherein said
20 external data-input device further comprises a connecting cable detachably connected between said speech receiving and recognizing receiving device and said electronic device.
19. The external data-input device according to claim 13, wherein said electronic device is a personal digital assistant (PDA).
20. The external data-input device according to claim 13, wherein said portable electronic device is a mobile phone.

25